



## ***OWTS Program Application Guidance for Licensed Designers***

### ***Identify Key Design Constraints***

- Utilize RIDEM Environmental Resource Map <http://www.dem.ri.gov/maps/index.php>  
Enable the Following Map Layers by clicking on Layer List Icon:
  - ✧ Activate Groundwater Resources Layer to assist in identifying public well locations (OWTS Rule 22, Table 22.4) – If applicable contact RIDOH – Public Drinking Water Program at (401) 222-5960 for specific public well locations.
  - ✧ OWTS Critical Resource Areas Layer
  - ✧ Drinking Water Supply Watersheds Layer
  - ✧ Wetland Regulatory Jurisdiction/CRMC Jurisdiction Layer
- Is the system sited within a Critical Resource Area? If Yes, nitrogen reducing technology is required (See OWTS Rule 38 and 39).
- Is the system in a Water Supply Watershed? If Yes, design must comply with OWTS Rule 40.
- Is there a cesspool on lot? If Yes, clearly identify on plan and specify proper abandonment practices on plan per OWTS Rule 52. (This also applies to all other existing OWTS components that will no longer be used.)
- If the applicant's lot or an adjacent lot is served by a private or public well, or if there is a drinking water well within 200ft of the proposed OWTS and the proposed design flow exceeds 345 gpd per 20,000 sq. ft. of the applicant's lot area a nitrogen reducing technology must be specified in the design per OWTS Rule 41 or Nitrogen Credit Land must be designated per OWTS Rule 41.4.

### ***OWTS Application Form***

- Verify that all information on the application form is complete and accurate.

### ***Soil Evaluation/Wet Season Verification Form***

- Clearly identify the Seasonal High-Water Table (SHWT) elevation and existing grade elevations at design point.
- Establish soil category and loading rate per OWTS Rule 32 or per Advanced Technology Certification and Advanced Technology Design Manual, clearly indicate on plan.

### ***Treatment System Design***

- Verify that minimum required separation distance(s) to the SHWT and restrictive layer are provided per OWTS Rule 32, 39, or 40 or per Advanced Technology Certification and Advanced Technology Design Manual.
- Verify that each major component was designed in compliance with OWTS Rules, as applicable.
  - ✧ Building Sewers – OWTS Rule 24
  - ✧ Grease Tanks – OWTS Rule 25
  - ✧ Septic Tanks – OWTS Rule 26
  - ✧ Septic Tank Effluent Pipe – OWTS Rule 27

- ✧ Holding Tanks – OWTS Rule 28
- ✧ Pumps – OWTS Rule 24
- ✧ Provide System Sizing Calculations
- ✧ Concrete Chambers – OWTS Rule 34

- ✧ Pump Tanks – OWTS Rule 29
- ✧ Distribution Boxes – OWTS Rule 31
- ✧ Dispersal Trenches – OWTS Rule 33

- If Applicable, verify that the design satisfies Alternative/Experimental Technology Approval Requirements (See link here: <http://www.dem.ri.gov/programs/water/owts/regulations-reports/altetek.php>)
- If Applicable, verify that the design complies with *Guidelines for the Design, Use, and Maintenance of Pressurized Drainfields – November 2013* (See link here: <http://www.dem.ri.gov/programs/benviron/water/permits/isds/pdfs/pdfls.pdf> )
- Review Plan for conformance with OWTS Rule 18 “Required Content of OWTS Submissions”
- Verify that offsets from all OWTS components to property lines and structures are shown.
- Verify all setbacks conform with OWTS Rule 22, Tables 22.1, 22.2, 22.3, and 22.4, as applicable.
- If application is an Alteration Variance with no increase in flow, list variance(s) requested on the site plan (Note: Variance fee & variance request form are not required.)
- If application is New Building Construction Variance or Alteration Variance with an increase in flow list variance(s) requested on the site plan, provide 200ft radius map, list of ownership within 200ft, variance request form and variance fee.
- Review All Notes on Plans for Consistency with plan design details.
- Be sure to provide designer’s email address (ensure it is legible) to expedite the application process should revisions be required.